

# ASSIGNMENT 1

Textbook Assignment: "Bombs, Fuzes, and Associated Equipment," chapter 1, pages 1-1 through 1-52, and "Aircraft Rockets and Rocket Launchers," chapter 2, pages 2-1 through 2-32.

---

- 1-1. The action that causes a fuze to detonate before impact when any substantial object is detected at a predetermined distance from the fuze is known by what term?
  1. Proximity
  2. Delay
  3. Instantaneous
  4. Functioning time
- 1-2. The time required for a fuze to detonate after impact or a preset time is known by what term?
  1. Arming time
  2. Impact delay time
  3. Preset delay time
  4. Functioning time
- 1-3. In its simplest form, which of the following devices is like the hammer and primer used to fire a rifle or pistol?
  1. An electrical fuze
  2. A capacitor
  3. A mechanical fuze
  4. A resister
- 1-4. The functioning delay of an electrical fuze is initiated by what means?
  1. Electrically only
  2. Mechanically only
  3. Electromechanically
  4. Hydraulically
- 1-5. A fuze that does NOT have the elements of its firing train in the proper position for firing until the fuze is fully armed is known as what type of fuze?
  1. A detonator-safe fuze
  2. A fail-safe fuze
  3. A shear-safe fuze
  4. A armed-safe fuze
- 1-6. To help make carrier operations safe, a bomb that is accidentally released during an aircraft's landing or takeoff will NOT normally have sufficient air travel, velocity, or time to fully arm the fuze because of what fuze feature?
  1. Pressure arming
  2. Delay arming
  3. Fail-safe arming
  4. Impact arming
- 1-7. The two observation windows of an M904 series fuze are used for what purpose ?
  1. To determine the safe condition only
  2. To determine the safe/armed condition
  3. To determine if the fuze is armed
  4. To determine the time setting
- 1-8. The release speeds for arming an M904 fuze fall into which of the following ranges?
  1. 100 to 350 knots
  2. 135 to 400 knots
  3. 150 to 415 knots
  4. 170 to 525 knots
- 1-9. Deflagration to detonation occurs at what average reaction on a Mk 83 with an M904E4 fuze?
  1. 8 min 45 sec
  2. 9 min 49 sec
  3. 10 min
  4. 12 min
- 1-10. At impact, what component drives the striker body and firing pin down into the M9 delay element of an M904 fuze?
  1. The forward part of the fuze body
  2. The booster
  3. The arming vane
  4. The igniter

- 1-11. The Mk 339 fuze is installed in a Mk 20 bomb cluster at which of the following times?
1. During shipment
  2. During assembly
  3. During flight quarters
  4. During a weapons inspection
- 1-12. The primary and option delays on a Mk 339 Mod 0 fuze can be adjusted from a minimum of 1.2 seconds to what maximum number of seconds?
1. 30.0 sec
  2. 40.0 sec
  3. 50.0 sec
  4. 60.0 sec
- 1-13. The primary delay on a Mk 339 Mod 0 is set at what time?
1. 1.8 sec
  2. 1.5 sec
  3. 1.2 sec
  4. 0.0 sec
- 1-14. The functional delays for both modes of a Mk 339 Mod 1 fuze can be adjusted from a minimum of 1.2 seconds to what maximum number of seconds?
1. 100 sec
  2. 75 sec
  3. 50 sec
  4. 25 sec
- 1-15. A Mk 399 series fuze firing train is aligned by what means?
1. The timer starting pin
  2. The option time pin
  3. The impeller
  4. The retainer slide
- 1-16. When the pilot selects the option mode of delivery for a Mk 339 Mod 1 fuze, what wires are pulled out?
1. The arming and options wires
  2. The primary and option wires
  3. The primary and arming wires
  4. The primary and secondary wires
- 1-17. The safe-arm band of a Mk 346 fuze will be visible after approximately how many revolutions of the input shaft and clutch?
1. 45 revolutions
  2. 40 revolutions
  3. 32 revolutions
  4. 22 revolutions
- 1-18. Which adapter booster allows the use of tail fuzes in Mk 80 series bombs?
1. M150/T46
  2. M150/T45
  3. M148/T46
  4. M148/T45
- 1-19. The Mk 344 Mod 0 and Mod 1 are identical in all EXCEPT which of the following ways?
1. The Mod 1 is shorter
  2. The Mod 1 does not have a retard sensor
  3. The Mod 1 is HERO susceptible
  4. The Mod 1 is used for retard delivery
- 1-20. What safety device is used to adapt a Mk 344/Mk 376 fuze to the fuze well of a bomb?
1. Mk 76
  2. Mk 40
  3. Mk 32
  4. Mk 31
- 1-21. A FMU-143/B tail fuze is used with what weapon?
1. GBU-24B/B
  2. GBU-12
  3. CBU-78
  4. CBU-100
- 1-22. What device prevents Electromagnetic radiation from entering the fuze circuits of a Mk 80 series bomb?
1. A mechanical nose fuze
  2. An electric tail fuze
  3. A Mk 122 arming safety switch
  4. A bomb rack safety pin
- 1-23. What is the alternate method for initiating a Mk 43 TDD?
1. Electrical
  2. Manual
  3. Proximity
  4. Mechanical
- 1-24. An FMU-140/B proximity fuze will function at what minimum altitude?
1. 300 ± 5 ft
  2. 300 ± 25 ft
  3. 325 ± 5 ft
  4. 325 ± 25 ft

- 1-25. What factor determines the number of bombs that are loaded on each metal pallet?
1. The size of the pallet
  2. The quantity of bombs ordered
  3. The size of the bombs
  4. The type of bomb hoist used
- 1-26. What nose plug series is a replacement for the ogive nose plug?
1. MXU-735
  2. MXU-730
  3. MXU-611
  4. BDU-735
- 1-27. What is the diameter of a Mk 2 Mod 0 double brass arming wire?
1. 0.032 in.
  2. 0.064 in.
  3. 0.057 in.
  4. 0.096 in.
- 1-28. What is the basic difference between the types of conical fins?
1. Color
  2. Weight
  3. Markings
  4. Physical size
- 1-29. What is the main structure of a Mk 15/Mod bomb fin?
1. The release band
  2. The support flange
  3. The support tube
  4. The drag plate
- 1-30. The bomb fin of a MAU-91 is prevented from rotating by which of the following devices?
1. Two locking pins
  2. A garter spring
  3. Eight setscrews
  4. A fin release wire
- 1-31. Which of the following mode is NOT a delivery mode for a Snakeye fin?
1. Pilot option
  2. Retarded
  3. Unretarded
  4. Preflight selectable
- 1-32. A BSU-85/B attaches to what weapon?
1. Mk 82
  2. Mk 83
  3. DST 40
  4. GBU 12
- 1-33. The wedges on the trailing edge of a BSU-85/B bomb fin are used for what purpose?
1. Low-drag stability
  2. High-drag stability
  3. Extra tail weight
  4. Directional control
- 1-34. What degree wedge is located on the tips of a BSU-86 bomb fin?
1. 10°
  2. 25°
  3. 35°
  4. 45°
- 1-35. A GBU-24B/B will penetrate how many feet of reinforced concrete?
1. 1 to 2 ft
  2. 2 to 3 ft
  3. 3 to 4 ft
  4. 4 to 6 ft
- 1-36. The total amount of thermal coating missing from a GBU-24B/B must NOT exceed what amount?
1. 40 sq in.
  2. 20 sq in.
  3. 15 sq in.
  4. 25 sq in.
- 1-37. DSTs are identified by what color stripes?
1. Brown
  2. Yellow
  3. Blue
  4. White
- 1-38. A CBU-99 uses what bomb dispenser?
1. Mk 7 Mod 3
  2. SUU-58
  3. SUU-75
  4. SUU-76
- 1-39. A Mk 20 Mod 6 uses what bomb dispenser?
1. Mk 7 Mod 2
  2. Mk 7 Mod 6
  3. Mk 7 Mod 3
  4. SUU-76
- 1-40. What is the overall weight of a Mk 7 Mod 6 bomb dispenser?
1. 147 lb
  2. 250 lb
  3. 505 lb
  4. 690 lb

- 1-41. What design feature causes the movable fins on a Mk 20 to open?
1. Spring force
  2. Mechanical linkage
  3. Electrical current
  4. Hydraulic pressure
- 1-42. A CBU-78/B Gator utilizes what dispenser?
1. SUU-99
  2. SUU-58
  3. Mk 7 Mod 4
  4. Mk 7 Mod 6
- 1-43. What total number of BLU-91 mines are contained in a CBU-78 Gator?
1. 35
  2. 40
  3. 45
  4. 60
- 1-44. A Mk 116 Weteye chemical bomb contains approximately how many pounds of chemical agent?
1. 749 lb
  2. 567 lb
  3. 492 lb
  4. 347 lb
- 1-45. Which of the following chemical tanks is designed to generate a
1. Aero 14
  2. Aero 12
  3. Mk 116
  4. Mk 94
- 1-46. Rockets are propelled by what means?
1. The expulsion of gases
  2. An electrical discharge
  3. A jet engine
  4. A turbo fan engine
- 1-47. Presently all rocket motor tubes are made from what material?
1. Aluminum
  2. Steel
  3. Fiberglass
  4. Titanium
- 1-48. If inhibitors were NOT used on rocket motors that use propellant grain, what action would occur?
1. Erosive burning
  2. Excessive pressure
  3. An increased burning rate
  4. A decreased burning rate
- 1-49. The igniter is in what location on a 2.75-inch motor?
1. The nozzle fin assembly
  2. The forward end of the motor
  3. The nozzle plate
  4. The fin-actuating piston
- 1-50. A Mk 66 nozzle assembly consists of all EXCEPT which of the following items?
1. A carbon insert
  2. A weather seal
  3. A fin assembly
  4. An igniter
- 1-51. What is the major difference between the nozzle and fin assemblies of a Mk 4 and Mk 40 rocket motor?
1. The type of inserts used
  2. The type of crosshead used
  3. The type of cylinder used
  4. The type of nozzle plate used
- 1-52. What device holds the fins in a folded position on a Mk 16 motor?
1. A fin release band
  2. A foam plug
  3. A foil fin retainer
  4. A plastic fin retainer
- 1-53. Which of the following devices cause a Mk 16 to spin during free flight?
1. Spring loaded fins
  2. Rocket flanges
  3. Flutes
  4. Venturi nozzles
- 1-54. HE-FRAG warheads are used against which of the following targets?
1. Bunkers
  2. Runways
  3. Bridges
  4. Personnel
- 1-55. What is the only heat warhead currently in use?
1. Mk 63 Mod 0
  2. Mk 5 Mod 0
  3. WDU-4A/A
  4. M151
- 1-56. What is the only anti-personnel warhead currently in use?
1. Mk 24 Mod 0
  2. Mk 32 Mod 0
  3. Mk 34 Mod 1
  4. Mk 67 Mod 0

1-57. A Mk 193 Mod 0 is installed in what warhead?

1. Mk 66 Mod 0
2. Mk 33 Mod 1
3. Mk 32 Mod 0
4. Mk 24 Mod 0

1-58. What NAVAIR publication provides authorized assemblies, safety precautions, and restrictions for airborne rockets?

1. 01-700
2. 11-85-5
3. 11-5D-20
4. 11-5A-17

1-59. The rocket motor is retained in a launcher tube by what means?

1. A detent
2. A cotter pin
3. An arming latch
4. A firing contact

1-60. What authority may authorize the disassembly or alteration of rocket components?

1. CO
2. NAVSEASYS COM
3. NAVAIRSYS COM
4. EOD